Amendments to the Claims:

1. (*Previously Presented*) A method of manufacturing an optical component comprising the following steps:
providing an optical waveguide with a bonding surface;
providing an optical article having a surface for bonding to the bonding surface of the optical waveguide;
contacting the bonding surface of the waveguide and the surface of the article for bonding with an acid;
contacting the bonding surface of the waveguide and the surface of the article for bonding with a solution having a pH greater than 8, whereby termination groups selected from the group consisting of –OH, ≡Si-OH, =Si-$(OH)_2$, -$Si(OH)_3$ and –O-Si-$(OH)_3$, and combinations thereof, are formed on the surfaces; and
bonding the surface of the optical waveguide and the surface of the article without an adhesive and at a temperature below the softening temperature of the optical waveguide.

2. (*Original*) The method of claim 1, wherein the optical article includes a second optical waveguide.

3. (*Original*) The method of claim 2 wherein the first and second optical waveguides comprise optical fibers.

4. (*Original*) The method of claim 3, wherein the first and second optical waveguide fibers are disposed within ferrules and the ferrules are bonded together.

5-9. (*Canceled*)

10. (*Original*) The method of claim 1, wherein the optical article includes a photonic component selected from the group consisting of a waveguide, a planar waveguide, a grating, a filter and a lens.

11. (*Original*) The method of claim 1, wherein the article includes an infrared transparent material.

12. (*Original*) An optical component made by the method of claim 10.

13-16. (*Canceled*)

17. (*Previously Presented*) The method of claim 1, wherein the solution having a pH greater than 8 includes a hydroxide.

18. (*Previously Presented*) The method of claim 1, wherein the solution having a pH greater than 8 includes ammonium hydroxide.

19. (*Previously Presented*) The method of claim 1, further including the step of eliminating adsorbed water molecules at the interface between the bonding surface of the optical fiber waveguide and surface of the article.

20. (*Previously Presented*) The method of claim 1, wherein a polymer is present in the optical waveguide or the optical article, and the bonding step is performed at a temperature below the temperature at which the polymer degrades and applying pressure on the bonding surfaces.

21. (*Currently Amended*) A method of bonding a lens array to an optical waveguide array comprising:
providing an array of optical waveguides, the waveguides having bonding surfaces;
providing a lens array having surfaces for bonding to the bonding surfaces of the optical waveguides;
contacting the bonding surfaces of the waveguide and the surfaces of the ~~article~~ lens array for bonding with an acid;
contacting the bonding surfaces of the waveguides and the surfaces of the lens array for bonding with a solution having a pH greater than 8, whereby termination groups selected from the group consisting of –OH, ≡Si-OH, =Si-$(OH)_2$, -Si$(OH)_3$ and –O-Si-$(OH)_3$, and combinations thereof, are formed on the surfaces; and

placing the surfaces of the lens array in contact with the bonding surfaces of the optical waveguides in the absence of an adhesive and below the softening temperature of the optical waveguides.

22. (*Original*) The method of claim 21 wherein the optical waveguides comprise optical fibers.

23-28. (*Canceled*)

29. (*Previously Presented*) The method of claim 21, further including the step of eliminating adsorbed water molecules at the interface between the bonding surface of the optical fiber waveguide and surfaces of the lens array.

30. (*Previously Presented*) The method of claim 21, wherein the optical fibers are disposed in a frame including a bonding surface and the lenses are disposed in a frame including a bonding surface, and the bonding surface of the lens frame and the bonding surface of the fiber frame are placed in contact to bond the frames together.

31. (*Previously Presented*) The method of claim 21, further including the step of applying pressure to the bonding surfaces during the step of placing the surfaces in contact.

32. (*Original*) The method of claim 31, wherein the pressure is applied with the assistance of gas pressure or a vacuum.

33. (*Previously Presented*) A method of manufacturing an optical component comprising:
providing at least two optical articles each having a bonding surface;
contacting the bonding surfaces of the optical articles with an acid;
contacting the bonding surfaces of the optical articles with a solution having a pH greater than 8, whereby termination groups selected from the group consisting of –OH, ≡Si-OH, =Si-$(OH)_2$, -$Si(OH)_3$ and –O-Si-$(OH)_3$, and combinations thereof, are formed on the surfaces; and
bonding the surface of the respective optical articles to each other without an adhesive and at a temperature below the softening temperature of the optical article.

34. (*Original*) The method of claim 33, wherein the optical article is selected from the group consisting of a lens, prism, polarizer, grating, filter, birefringent crystal and faraday rotator.

35-42. (*Canceled*)

43. (*Previously Presented*) The method of claim 33, wherein the solution having a pH greater than 8 includes a hydroxide.

44. (*Previously Presented*) The method of claim 33, wherein the solution having a pH greater than 8 includes ammonium hydroxide.

45. (*Previously Presented*) The method of claim 33, further including the step of eliminating adsorbed water molecules at the interface between the bonding surfaces of the optical articles.

46. (*Previously Presented*) The method of claim 33, wherein a polymer is present in the optical articles, and the bonding step is performed at a temperature below the temperature at which the polymer degrades and applying pressure on the bonding surfaces.